



LOGISTICS METRICS

This handbook provides Air Intelligence Agency (AIA) and AIA administratively supported units standardized logistics metrics for use in their logistics complexes. It makes use of existing data collection systems within the logistics complex and establishes goals and desired trends for each metric. Regular use of these metrics will enable managers and supervisors to improve their key logistics processes and enable them to compare trends and results with other AIA units. This handbook is not a directive and cannot be used as authority to establish or implement procedures requiring additional resources. This handbook does not apply to the United States Air Force Reserve or the Air National Guard. Any unit may use this handbook.

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CHAPTER 1

1.1. INTRODUCTION

1.1.1. The adaptation of Quality Air Force principles and techniques caused an explosion in data collection efforts within units and logistics complexes. Unfortunately within AIA, each unit developed specialized metrics based on their needs or situation. This lack of standardization has made it extremely difficult or prevented effective agency-wide data comparisons and identification of best processes. The metrics identified here are meant to serve as standardized measurements for agency logistics complexes, enabling them to make valid comparisons with sister units, establish benchmarks, and improve long-term logistics support.

1.1.2. This handbook focuses on core logistics functions and establishes standard metrics which measure the effectiveness or efficiency of these functions. Each metric identifies data sources, who needs the data, a recommended measurement interval and a desired trend or goal. These metrics were developed with one overriding objective in mind: Provide the field units standardized metrics without creating a new data collection system. The intention is to make collection and analysis of these metrics part of the normal deficiency analysis process already performed by management, maintenance support, maintenance workcenters and supply sections using existing maintenance and supply data systems such as CAMS, quality deficiency analysis system (QDAS), Standard Base Supply System, and the BIG SAFARI Inventory System.

1.2. KEY LOGISTICS FUNCTIONS

1.2.1. Logistics functions were divided into areas common to logistics and maintenance complexes. Logistics functions are: (1) maintenance of mission systems and equipment, (2) training personnel to accomplish maintenance, (3) measuring quality of maintenance performed, (4) measuring quality of training, and (5) ensuring resources, both human and equipment, are available to support mission requirements.

1.2.2. Maintenance effectiveness metrics measure how well maintenance of mission systems and equipment is performed. This is accomplished by measuring availability or operational rates and types of maintenance performed. Negative trends serve as indicators to management that increased analysis and investigation are needed to identify root causes of problems affecting mission accomplishment.

1.2.3. A key factor in ensuring peak equipment operation is your training program. Maintenance Training Metrics examine how well training is performed in the workcenter. Measuring the progress and effectiveness of workcenter training is the key to ensuring that maintenance technicians are trained and that the workcenter has the capability to maintain assigned equipment.

1.2.4. MSEP Metrics measure the effectiveness of the maintenance support section in meeting stated MSEP requirements in AFI 21-116. The MSEP program provides managers data on each workcenter's primary products-serviceable assets and trained personnel. Unfavorable trends or data points may indicate problems within the logistics complex that aren't reflected in overall mission readiness rates. They may also provide managers corroborating indicators that identify the root cause for decreases in overall mission readiness rates.

1.2.5. Manpower metrics measure the availability and management of a key resource within the maintenance complex--the people. Metrics were established to show how well AFPC is meeting unit needs and also the personal operations tempo (PERSTEMPO) rate of assigned individuals.

1.2.6. Supply metrics measure the ability of the supply function, either base, special supply account (FX) or both, to meet unit and workcenter needs for serviceable line replaceable unit (LRU) and parts. A continued inability to meet maintenance requirements will have a direct effect on mission readiness and accomplishment.

1.3. USE OF METRICS

1.3.1. Maintenance complexes should use only those metrics which apply to them and can provide valid data for trends. For instance, several supply metrics apply only to complexes with warehouses. Also, several of the metrics identified as MSEP metrics would not be collected on a quarterly basis by Category III, IV, or functionally supported maintenance activity (FSMA) units and due to the small numbers involved may not be used at all. Instead these units might trend the appropriate results from annual staff assistance visits (SAV), activity inspections, managerial evaluations and or those inspections completed by their maintenance support representatives (MSR).

1.3.2. Many units have already established metrics to measure various processes within their unit. The intention of this handbook is to supplement or enhance existing data collection and analysis efforts, not to mandate the use of new metrics. This handbook serves as a starting point for those units desiring to implement standardized data collection efforts to benchmark key processes within the logistics complex and be able to compare these results with other units.

CHAPTER 2

2.1. MAINTENANCE EFFECTIVENESS METRICS

2.1.1. The primary mission of the maintenance function is to provide operational equipment for mission accomplishment. This is accomplished by performing maintenance, both preventive and corrective, to ensure that equipment and systems are fully operational and available. The success of the unit's maintenance function has a direct impact on the ability of the unit to meet mission tasking.

2.1.2. The key indicators below measure the overall success and ability of logistics to meet mission requirements. The indicated frequency of measurements are suggested minimums. Not meeting the desired goal or a negative trend indicates that management action or investigation is required. Regular measurement of mission equipment performance enables the unit LG and staff to identify deficiencies and improve overall mission readiness and accomplishment.

2.2. System Operational Rate Metric. $\text{System Operational Rate(\%)} = (\text{Number of Hours system(s) available or operational} / \text{Number of Hours system(s) programmed or scheduled for use}) * 100.$

2.2.1. Data measures or indicates: Indicates system operational/availability rates and potential ability to meet customer requirements. The AIA Master Program, mission schedules etcetera., provide normal customer operating hour requirements, but surges can greatly increase required or scheduled hours.

2.2.2. Source of data: CAMS, Maintenance Logs, Equipment Status Reports, Master Program, Mission Schedules

2.2.3. Frequency of Measurement: Monthly.

2.2.4. Data provided to: Unit LG and workcenter supervisors.

2.2.5. Desired Goal: 100%.

2.2.6. Desired Trend: Upward.

2.3. DIFM Repair Cycle Time Metric. Average DIFM Repair Cycle Time in days.

2.3.1. Data measures or indicates: Efficiency of workcenter repairing DIFM equipment. Excessive times may indicate problems with supplier quality or timeliness, poor maintenance training, excessive workload, poor technical data or lack of adequate test equipment.

2.3.2. Source of data: Materiel Control records, transaction records.

- 2.3.3. Frequency of Measurement: Monthly.
- 2.3.4. Data provided to: Unit LG and workcenters.
- 2.3.5. Desired Goal: 6 days processing time.
- 2.3.6. Desired Trend: Downward with upper limit of 10 days.

2.4. Repair Capability Metric. Repair Capability (%) = (Total Number Units Repaired/(Total Number of Units Repaired + Total Number Units NRTS)) * 100.

- 2.4.1. Data measures or indicates: Measures unit repair capability according to TO 00-20-3, Paragraph 6-3.
- 2.4.2. Source of data: MM and NRTS Log.
- 2.4.3. Frequency of Measurement: Quarterly.
- 2.4.4. Data Provided to: Unit LG and workcenters.
- 2.4.5. Desired Trend: Upward.

2.5. Self Sufficiency Metric. Self Sufficiency (%) = (Total Number of Units Repaired/(Total Number of Units Repaired + Number of Units Coded NRTS 2,3,5,6)) * 100

- 2.5.1. Data measures or indicates: Measures unit self sufficiency according to TO 00-20-3, Paragraph 6-3.
- 2.5.2. Source of data: MM and NRTS Log.
- 2.5.3. Frequency of Measurement: Quarterly.
- 2.5.4. Data Provided to: Unit LG and workcenters.
- 2.5.5. Desired Trend: Upward.

2.6. Unscheduled Maintenance Rate Metric. Unscheduled Maintenance Rate = (Number of Unscheduled Maintenance Actions by SRD, MDS or System) per month

- 2.6.1. Data measures or indicates: Provides management with cues for additional investigation. Systems with high numbers of unscheduled maintenance actions may be candidates for R&M initiatives for modification or replacement or could indicate problems in training and/or lack of technician experience.
- 2.6.2. Source of data: MDC, Maintenance logs.
- 2.6.3. Data provided to: LG and workcenter supervisors.
- 2.6.4. Frequency of Measurement: Quarterly.
- 2.6.5. Desired Trend: Down.

2.7. CND or NMF Rate Metric. CND or NMF Rate (%) = (Number of CND or NMF actions by SRD, MDS, or System/Total Number Unscheduled Maintenance Actions for SRD, MDS or System) * 100.

- 2.7. 1. Data indicates: Need for management to investigate possible problems in maintenance capability, possible unrealistic customer expectations or poor communication with customer to identify requirements or malfunctions. May also indicate inability to duplicate operating conditions in a maintenance environment which may indicate need for new test equipment or development of new testing procedures.
- 2.7.2. Source of data: MDC..
- 2.7.3. Data provided to: LG and workcenter supervisors.
- 2.7.4. Frequency of Measurement: Quarterly.
- 2.7.5. Desired Goal: Zero.
- 2.7.6. Desired Trend: Downward.

2.8. Chargeable NRTS Rate Metric. Number of Chargeable NRTS Actions (NRTS 2,3,5,6,7) by SRD, MDS or System.

- 2.8.1. Data indicates: Ability of logistics complex to repair and maintain mission equipment. Indicates that management action is required to develop capability for repair actions.
- 2.8.2. Source of data: NRTS Log
- 2.8.3. Frequency of Measurement: Quarterly.
- 2.8.4. Data provided to: Unit LG and workcenter supervisors.
- 2.8.5. Desired Goal: Zero.
- 2.8.6. Desired Trend: Downward.

3.1. MAINTENANCE TRAINING METRICS

- 3.1.1. Workcenter supervisors are responsible for training maintenance personnel according to AFI 21-116, AFI 36-2201, and AFI 36-2232. Maintenance training is a key process to the maintenance organization and directly

impacts mission accomplishment The key indicators below provide managers a means to measure logistics training effectiveness. Measurement frequencies are suggested minimums.

3.1.2. Not meeting the desired goal or trend indicates that some type of management action or investigation is required. Regular measurement and analysis of training data are integral parts of a quality training program.

3.2. Task Coverage Metric. Workcenter task coverage (%) = (Number of Tasks meeting coverage requirements/ Total tasks) * 100.

3.2.1. Data measures or indicates: Workcenter's ability to meet mission requirements.

3.2.2. Source of data: CAMS TVL Report or manual TVL

3.2.3. Frequency of Measurement: Monthly.

3.2.4. Data provided to: Workcenters and Unit LG.

3.2.5. Goal: 100%.

3.2.6. Desired Trend: Upward.

3.3. 30 Day Training Progression Metric. Number of personnel over 30 days with no training progression.

3.3.1. Data measures or indicates: Indicates training program effectiveness and supervisor/trainer involvement with trainees in workcenters.

3.3.2. Source of data: CAMS TVL or other products.

3.3.3. Frequency of Measurement: Monthly.

3.3.4. Data provided to: Unit LG and workcenter supervisors.

3.3.5. Goal: 0.

3.3.6. Desired Trend: Downward.

3.4. Individual Training Progression Metric. Individual training progression rate (%) = (Number of training tasks completed/Number of training tasks scheduled to be completed by training plan) * 100.

3.4.1. Data measures or indicates: Progress of individual trainees in meeting objectives established in workcenter training plans. It identifies trainees having difficulty progressing as scheduled and trainees that may require additional assistance to complete training. Trends may indicate that adjustments to training plans may also be required.

3.4.2. Source of data: CAMS, Individual 623s, Workcenter training plans

3.4.3. Frequency of measurement: Monthly.

3.4.4. Data provided to: Workcenter supervisors and Unit LG.

3.4.5. Goal: 100% on time progression with lower control limit of 80%.

3.4.6. Desired Trend: Maintain above lower control limit.

3.5. Overdue Ancillary Training Metric. Overdue training rate (%) = (Number of personnel overdue Ancillary Training/Number of Assigned Personnel)* 100.

3.5.1. Data measures or indicates: Effectiveness of workcenter in completing Ancillary Training requirements

3.5.2. Source of data: CAMS or other product.

3.5.3. Frequency of Measurement: Monthly.

3.5.4. Data provided to: Unit LG and workcenter supervisors.

3.5.5. Goal: 0%.

3.5.6. Desired Trend: Downward.

3.6. Duty Position Qualified Metric. Duty Position Qualified Rate (%) = (Number of Personnel 100% Duty Position qualified by AFSC/Number of assigned personnel by AFSC) * 100.

3.6.1. Data measures or indicates: Overall effectiveness of training program.

3.6.2. Source of data: CAMS or other product.

3.6.3. Frequency of Measurement: Quarterly

3.6.4. Data provided to: Unit LG, workcenter supervisors and HQ AIA/DPT and LGMM.

3.6.5. Goal: 65% as established by AFD 36-22.

3.6.6. Desired Trend: Upward.

CHAPTER 4

4.1. MAINTENANCE STANDARDIZATION AND EVALUATION PROGRAM METRICS

4.1.1. Chiefs of Logistics are required by AFI 21-116 and AFI 21-116/AIA Supplement 1 to establish an maintenance standardization and evaluation program to measure the quality of maintenance performed in the maintenance complex and the overall maintenance effectiveness of the Logistics Complex. The MSEP program makes use of technical and personnel evaluations to assess the quality and effectiveness of core logistics and maintenance processes and provide valuable data to management on deficiencies. The depth of the MSEP program depends on the maintenance category assigned to the unit by AFI 21-116/AIA Supplement 1.

4.1.2. MSEP metrics fall into two separate areas, personnel evaluations and technical evaluations. These two areas are the primary focus of the MSEP program and provide the LG a clear picture of how well workcenters are training personnel and maintaining equipment. These metrics trend individual evaluation results for analysis by management. Metrics were not identified for managerial evaluations; however, data collected and trends identified by personnel and technical evaluations metrics should be examined during managerial evaluations to determine if management actions and follow-up has been taken or is needed.

4.1.3. Personnel evaluations validate the workcenter training process. Negative trends may indicate that training plans are incomplete, incorrect, or inadequate; workcenters may not be allowing enough time for training or training to required proficiency level, or the trainees may be experiencing difficulty for other reasons. All these problems require some type of management action to correct and follow-up to ensure that corrective actions fix the problem.

4.1.4. Technical inspections provide the LG and production workcenters internal verification of their maintenance processes and also measures the quality of items received from outside sources. Negative trends identified by technical inspections indicate problems within the workcenters or with outside suppliers. Technical inspections also include incoming equipment, outgoing equipment, and special inspections. See AFI 21-116 for descriptions of inspections and categorizing of discrepancies.

4.2. MSEP PERSONNEL EVALUATION METRICS

4.2.1. Personnel Evaluation Rate Metric. $\text{Evaluation Rate (\%)} = (\text{Number of Personnel Evaluations conducted} / \text{Number of Personnel Evaluations required by AFI 21-116 and AIA Supplement 1}) * 100$.

4.2.1.1. Data measures or indicates: Measures effectiveness of Maintenance Support in conducting required evaluations. Failure to meet evaluation requirements will impact ability to evaluate workcenter training programs.

4.2.1.2. Frequency of measurement: Quarterly

4.2.1.3. Source of data: Evaluation reports, logs, and AFI 21-116.

4.2.1.4. Data provided to: Unit LG and workcenter supervisors.

4.2.1.5. Goal: 100%.

4.2.1.6. Desired Trend: Upward.

4.2.2. Personnel Evaluation Pass Rate Metric. $\text{Satisfactory Personnel Evaluations Rate (\%)} = (\text{Number of Satisfactory Personnel Evaluations} / \text{Number Personnel Evaluations Conducted}) * 100$.

4.2.2. 1. Data measures or indicates: Measures overall effectiveness of workcenter training programs, negative trends may indicate problems in workcenter training plans or training process.

4.2.2.2. Frequency of measurement: Quarterly.

4.2.2.3. Source of data: Evaluation reports or logs.

4.2.2.4. Data provided to: Workcenter supervisors and unit LG.

4.2.2.5. Goal: 100% with lower limit of 90%.

4.2.2.6. Desired Trend: Upward or maintained above 90%.

4.2.3. Personnel Evaluation Error Rate Metric. Average number of category I, II, III errors per personnel evaluation.

4.2.3.1. Data measures or indicates: Data measures effectiveness of workcenter training program. Data is collected and reported separately by category of error. Category I and II errors require immediate management action to identify cause of error and action taken by workcenter to correct training or maintenance processes.

Trends in Cat III errors may indicate problems with overall training and maintenance practices and should be addressed by workcenter supervisors.

4.2.3.2. Source of data: Evaluation Reports.

4.2.3.3. Frequency of measurement: Quarterly.

4.2.3.4. Data provided to: Unit LG and workcenter supervisors.

4.2.3.5. Goal: 0 errors for Cat I, II, and III with upper control limit of 5 errors for Cat III only.

4.2.3.6. Desired Trend: Downward.

4.3. MSEP TECHNICAL INSPECTION METRICS

4.3.1. Technical Inspection Rate Metric. Inspection rate (Number of Technical Inspections completed/Number of Technical Inspections required per sample plan in AFI 21-116, Attachment 7) * 100.

4.3.1.1. Data measures or indicates: Measures effectiveness of Maintenance Support in meeting Air Force technical inspection standards. Data does not include incoming or outgoing equipment inspections or special inspections.

4.3.1.2. Source of data: Inspection Report Log.

4.3.1.3. Frequency of Measurement: Quarterly

4.3.1.4. Data provided to: Unit LG and Maintenance Support Supervisor.

4.3.1.5. Goal: 100% with lower control limit set at 90%.

4.3.1.6. Desired Trend: Upward and or maintained within control area.

4.3.2. Technical Inspection Major Discrepancy Rate Metric. Average Number Of Major Discrepancies Per Technical Inspection = Number Of Major Discrepancies/Number Of Technical Inspections Performed.

4.3.2.1. Data measures or indicates: Measures quality of maintenance performed by workcenters or suppliers and quality of new items provided by supplier. Major errors indicate deficiencies in supplier quality or maintenance practices that can prevent mission accomplishment, injure personnel, or damage equipment. Immediate management action is required to identify the root cause and take corrective action. Data trending permits comparison with other units with same supplier(s) and or similar equipment.

4.3.2.2. Source of data: Inspection reports.

4.3.2.3. Frequency of Measurement: Quarterly.

4.3.2.4. Data provided to: Unit LG and workcenters.

4.3.2.5. Goal: Zero.

4.3.2.6. . Desired Trend: Downward or maintained at zero.

4.3.3. Technical Inspection Minor Discrepancy Rate Metric. Average Number Of Minor Discrepancies Per Technical Inspection = Number Of Minor Discrepancies and Number Of Technical Inspections.

4.3.3.1. Data measures or indicates: Measures overall quality of maintenance performed by workcenters and or quality of items received from suppliers. High averages may indicate deficiencies in supplier quality, inadequate technical data, deficiencies in workcenter training or inadequate test and production inspection procedures. While minor discrepancies may not prevent mission accomplishment, it may have a cumulative long term impact. Management action should be taken to determine root causes and the trending of data permits comparison with other units with similar equipment and suppliers.

4.3.3.2. Source of data: Inspection logs and reports.

4.3.3.3. Frequency of Measurement: Quarterly.

4.3.3.4. Data provided to: Unit LG and workcenters.

4.3.3.5. Goal: Zero, with upper control limit of one for end items (LRU) and five for systems consisting of five or more separate end items.

4.3.3.6. Desired Trend: Downward.

CHAPTER 5

5.1. MANPOWER UTILIZATION METRICS

5.1.1. Manpower Utilization Metrics reflect the logistic complex's ability to meet mission requirements, support contingency tasking, or absorb additional work loads. Several of the metrics listed below are high interest items because of the direct impact they have on mission accomplishment and quality of life

OPR: HQ AIA/LGMM (SMSgt Weaver)

Certified by: HQ AIA/LGM (Col Ritter)
Pages 16/Distribution: /F;X: AUL/LSE (1)
TSS/ADW (2), HQ AIA/LGMM (4)

5.2. Manning Percentage Metric. Manpower (%) = (Number of Personnel Assigned by CAFSC, number authorized by CAFSC on UMD) * 100.

5.2.1. Data measures or indicates: Effectiveness of Air Force in meeting unit manpower requirements. Low manning levels directly impacts two key mission functions: equipment maintenance and training.

5.2.2. Source of data: Unit manning documents.

5.2.3. Data provided to: Unit LG.

5.2.4. Frequency of measurement: Monthly.

5.2.5. Goal: 100% with lower control limit of 95% for overseas units and 90% for CONUS units.

5.2.6. Desired Trend: Upward and maintained within control area.

5.3. Personnel TDY Rate Metric. Personnel TDY Over 120 Days Per Year (%) = (Number Of Personnel TDY Over 120 Days Per Year/Average Number Of Personnel Assigned (Report By CAFSC)) * 100.

5.3.1. Data measures or indicates: Effectiveness in meeting CSAF stated goal of maximum of 120 days/year in TDY status.

5.3.2. Source of data: Personnel records, technician availability logs, workcenter schedules.

5.3.3. Data provided to: Unit LG/LG1 and workcenter supervisors.

5.3.4. Frequency of Measurement: Monthly.

5.3.5. Goal: Zero.

5.3.6. Desired Trend: Downward.

5.4. Projected Annual TDY Rate Metric. Projected Individual Annual TDY Rate (Days) = TDY Man Days Projected For Next Year and Projected Number Personnel Assigned (Compute By CAFSC)

5.4.1. Data measures or indicates: Identifies projected TDY rate for upcoming FY. Projected rates in excess of 120 days cue management to take action with higher headquarters to reduce TDY workload or increase manpower available for tasking.

5.4.2. Source of data: Unit manning documents, historical data.

5.4.3. Data provided to: Unit LG, LG 1.

5.4.4. Frequency of Measurement: Monthly.

5.4.5. Goal: Less than 120 days per year/person.

5.4.6. Desired Trend: Down.

5.5. TDY Rate Metric. TDY Rate (days) = Number of Days TDY past year/Number personnel assigned (Compute by CAFSC).

5.5.1. Data measures or indicates: Measures actual unit TDY rates. Indicates effectiveness in meeting CSAF goal of 120 days TDY per year. Trend indicates need for, or success of, management actions to equalize TDY taskings.

5.5.2. Source of data: Unit manning documents and historical data.

5.5.3. Frequency of Measurement: Monthly.

5.5.4. Data provided to: LG, LG 1, Work center Supervisors.

5.5.5. Goal: 120 days/year or less.

5.5.6. Desired Trend: Downward.

5.6. Man-hour Utilization Rate Metric. Man-Hour Utilization Rate (%) = (Total Unscheduled And Scheduled Man-hours Expanded Per Month/Total Man-hours Available)* 100.

5.6.1. Data measures or indicates: Data indicates utilization and workload of assigned personnel. Low utilization rates may indicate need for reductions in manpower resources due to increased system reliability or reduction in work load, while extremely high rates may indicate need for additional manpower resources.

5.6.2. Source of data: MDC, Personnel Availability Logs.

5.6.3. Frequency of Measurement: Quarterly.

5.6.4. Data provided to: LG.

5.6.5. Desired Goal: Minimum 80% with low limit set at 60%.

5.6.6. Desired Trend: Upward and maintained within the control area.

CHAPTER 6

6.1. SUPPLY EFFECTIVENESS METRICS

6.1.1. The Logistics supply section provides support to AIA maintenance organizations either as a satellite supply section or as an FX providing specialized supply support. How well the supply section and maintenance manage materiel resources directly impacts how well the unit will meet mission requirements.

6.1.2. The key indicators below measure the overall ability of the supply section to meet the needs of the logistics complex. Not meeting the desired goal or trend indicates that management action and/or further investigation is required.

6.2. MICAP Rate Metric. $\text{MICAP Rate (\%)} = (\text{Number of MICAPs by SRD, MDS, System, Total Requests Processed}) * 100.$

6.2.1. Data measures or indicates: Indicates whether adequate numbers of spares are on-hand to support mission requirements and identifies additional LRUs for increased stock levels. High numbers of MICAP requisitions could be the result of depot support postures or inadequate stockage practices.

6.2.2. Source of Data: Base Supply Management Report (M32) and MICAP Verification Checklists.

6.2.3. Frequency of Measurement: Monthly.

6.2.4. Data Provided To: Unit LG.

6.2.5. Desired Goal: Less than 5 percent of total backorders.

6.2.6. Desired Trend: Downward.

6.3. TRN Processing Metric. Number of TRNs Processed.

6.3.1. Data indicates: Measures the amount of demand data on the item record and the repair cycle data on the repair cycle record. Low number could mean TRNs are not being processed to update demand due to maintenance not providing sufficient data.

6.3.2. Source of Data: Base Supply Management Report (M32), Materiel Control Records, and Daily Document Register (DO4).

6.3.3. Frequency of measurement: Monthly.

6.3.4. Data provided to: Unit LG.

6.3.5. Desired Goal: 100 percent processing.

6.3.6. Desired Trend: Upward.

6.4. Due-out Cause Code Analysis Metric. Due-out Cause Code Analysis by type.

6.4.1. Data indicates: Provides management with cues for additional investigation. High numbers of certain cause codes can identify the need for additional training, source of supply stockage problems, or increased management involvement in stockage practices.

6.4.2. Source of Data: Base Supply Management Report (M32).

6.4.3. Frequency of measurement: Monthly.

6.4.4. Data provided to: Unit LG.

6.4.5. Desired Goal: None, for analysis only.

6.4.6. Desired Trend: Downward.

6.5. UND A/B Excessive Due-out Rate Metric. $\text{UND A/B Excessive Due-outs (\%)} = (\text{Number of UND A/B Due-outs over 180 days/Total number of Due-outs}) * 100.$

6.5.1. Data indicates: Provides management with cues for additional investigation. Excessive numbers of due-outs may indicate training deficiencies, ineffective follow-up processing, stockage problems, or nonresponsive depot support.

6.5.2. Source of Data: Priority Monitor Report (D18) and/or Priority Requirements Action Listing (R01)

6.5.3. Frequency of measurement: Quarterly.

6.5.4. Data provided to: Unit LG.

6.5.5. Desired Goal: Less than 10% of total due-outs.

6.5.6. Desired Trend: Downward.

6.6. Supply Point Fill Rate Metric. $\text{Supply Point Fill Rate (\%)} = (\text{Items Filled/Total Number of Items in Supply Point}) * 100.$

6.6.1. Data measures or indicates: Measures the availability of supply point assets to support maintenance operations. Low fill rates can mean questionable stockage practices and/or nonresponsive depot support.

6.6.2. Source of Data: Supply Point Listing (Q13).

Frequency of measurement: Quarterly.

6.6.3. Data provided to: Unit LG and HQ AIA/LGS.

6.6.4. Desired Goal: 90 percent or higher.

6.6.5. Desired Trend: Upward.

6.7. Cannibalization Metric. Cannibalization Actions - Top Three End Items Canned.

6.7.1. Data measures or indicates: Provides management visibility of frequently canned assets requiring further study.

6.7.2. Source of Data: MICAP Cannibalization Log.

6.7.3. Frequency of measurement: Monthly.

6.7.4. Data provided to: Unit LG.

6.7.5. Desired Goal: None; for analysis only.

6.7.6. Desired Trend: Downward.

6.8 Issue Effectiveness Metric. Issue Effectiveness (%) = (Line items issued/ (Line items issued + line items backordered)) * 100.

6.8.1. Data measures or indicates: Indicates how well you are supporting customer requirements. Low issue effectiveness provides management with a cue for additional investigation. Also indicates the need for management involvement in stockage policy

6.8.2. Source of Data: Base Supply Management Report (M32)

6.8.3. Frequency of measurement: Monthly

6.8.4. Data provided to: Unit LG and HQ AIA/LGS.

6.8.5. Desired Goal: 80 percent or higher

6.8.6. Desired Trend: Upward

6.9. Stockage Effectiveness Metric. Stockage Effectiveness (%) = (Line items issued/ (Line items issued + Line items backordered - Line items backordered 4W)) * 100.

6.9.1. Data measures or indicates: Indicates whether adequate stock is on-hand to support mission requirements. Low stockage effectiveness provides management with a cue for additional investigation. Also indicates the need for management involvement in stockage policy.

6.9.2. Source of Data: Base Supply Management Report (M32).

6.9.3. Frequency of measurement: Monthly.

6.9.4. Data provided to: Unit LG and HQ AIA/LGS.

6.9.5. Desired Goal: 85 percent or higher.

6.9.6. Desired Trend: Upward.

6.10. Readiness Spares FILL Rate Metric. Percent of Readiness Spares Package Items available.

6.10.1. Data measures or indicates: Indicates whether adequate spares are available to support contingency requirements. Low fill rates may indicate questionable stockage practices, nonresponsive depot support or training deficiencies.

6.10.2. Source of Data: Mission Support Kit Listing (R50).

6.10.3. Frequency of measurement: Monthly.

6.10.4. Data provided to: Unit LG and HQ AIA.

6.10.5. Desired Goal: Ninety percent or higher.

6.10.6. Desired Trend: Upward.

6.11. Reverse Post Processing Rate. Number of Reverse Posts Processed.

6.11.1. Data measures or indicates: Provides visibility of errors occurring in the account. High numbers of errors can lead to erroneous inventory adjustments.

6.11.2. Source of Data: Base Supply Management Report (M32) and Document Control historical files.

6.11.3. Frequency of measurement: Monthly.

6.11.4. Data provided to: Unit LG.

6.11.5. Desired Goal: Less than 1 percent of total transactions.

6.11.6. Desired Trend: Downward.

6.12. Warehouse Inventory Accuracy Metric. Accuracy of Warehouse Inventories.

6.12..1 . Data measures or indicates: Measures the accuracy of inventory procedures and may indicate a need for management attention in warehouse practices.

6.12..2. Source of Data: Base Supply Management Report (M32), Consolidated Inventory Adjustment Document Register (M10) and Consolidated Listing of Inventory Adjustments (M23).

6.12.3. Frequency of measurement: Monthly

6.12.4. Data provided to: Unit LG.

6.12.5. Desired Goal: 100 percent.

6.12.6. Desired Trend: Upward.

6.13. Inventory Adjustment Metric. Number of Inventory Adjustments.

6.13.1. Data measures or indicates: High number of inventory adjustments may indicate need for management attention to storage and issue practices within the account.

6.13.2. Source of Data: Base Supply Management Report (M32), Inventory Adjustment Document Register (M10), and Inventory supporting documentation.

6.13.3. Frequency of measurement: Monthly.

6.13.4. Data provided to: Unit LG and HQ AIA/LGS.

6.13.5. Desired Goal: Zero.

6.13.6. Desired Trend: Downward.

6.14. MCAP Receipt Time Metric. MICAP Receipt Times From Supplier Compared To AF Standards Times For Priority Group 1.

6.14.1. Data measures or indicates: Measures the order and shipping time (O&ST) for MICAPs and computation of stock levels on the routing identifier (RID).

6.14.2. Source of Data: Base Supply Management Report (M32) and Materiel Control record files.

6.14.3. Frequency of measurement: Monthly.

6.14.4. Data provided to: Unit LG.

6.14.5. Desired Goal: 90 percent of all MICAPs received within standard.

6.14.6. Desired Trend: Upward.

APPENDIX A

ABBREVIATIONS

AIA	Air Intelligence Agency
AFSC	Air Force Specialty Code
CAMS	Core Automated Maintenance System
CAFSC	Control Air Force Specialty Code
CSAF	Chief of Staff, Air Force
CND	Cannot Duplicate
DIFM	Due-In-From-Maintenance
DUO	Due-out
FSMA	Functionally Supported Maintenance Activity
FX	Special Supply Account
LG	Chief of Logistics
LRU	Line Replaceable Unit
MDC	Maintenance Data Collection
MDS	Mission Design and Series
MICAP	Mission Incapable for Parts
MSEP	Maintenance Standardization and Evaluation Program
MSR	Maintenance Support Representative
NMF	No Malfunction Found
NRTS	Not Repairable This Station
OJT	On-the-Job-Training
OPR	Office of Primary Responsibility
PERSTEMO	Personal Operations Tempo
QDAS	Quality Deficiency Analysis System
SRD	System Reporting Designator
TO	Technical Order
TRN	Turn Around
TVL	Training Visibility Ledger
UND	Urgency of Need Designator